

A NEW SPECIES OF *UTETHEISA* FROM NEWFOUNDLAND
(LEPIDOPTERA : ARCTIIDAE).

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The species described below was contained among a lot of miscellaneous insects collected by Commander G. S. Stephenson, U. S. N., and submitted for determination by Dr. F. C. Bishopp, Bureau of Entomology and Plant Quarantine. Superficially it is strikingly similar to the other North American species (*U. bella* (L.) and *U. ornatrix* (L.)) but in genitalic characters it is conspicuously different.

Utetheisa idae, new species.

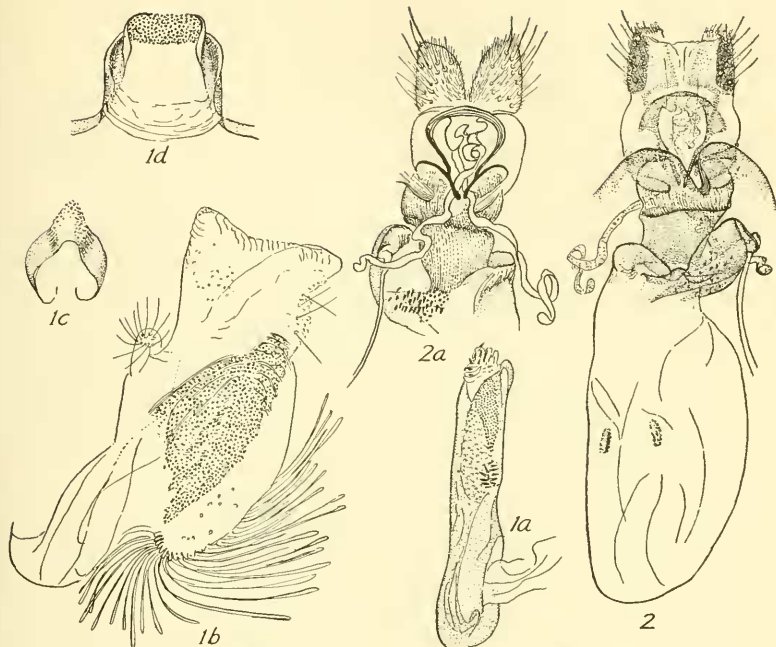
Pl. 8, Figures 1-2a.

Labial palpus white; first and second segments shaded with pale orange to light scarlet outwardly; third segment black outwardly. Antenna fuscous. Head, thorax and abdomen white; head with a large black spot in front and another on vertex, orange between antennae; collar orange in middle, with a black spot on each side and shaded with orange laterally; tegula orange basally, edged inwardly and outwardly with black; apex black; thorax with a small black median spot anteriorly; abdomen with a lateral row of indistinct black spots. Fore wing white to slightly yellowish, with five transverse rows of orange-red to scarlet spots, alternating with similar rows of black spots; apex with two short black dashes followed by a series of six or seven small black spots around termen to tornus; cilia white, shaded with blackish fuscous. Hind wing white, with a black border; apex broadly solid black; from hind margin, at vein two, a large quadrate inward expansion of the black border; at the end of cell, on discocellulars, two transverse black dashes. Legs white, shaded with blackish fuscous.

Male genitalia: Harpe broadly expanded and truncate at cucullus; at middle of harpe a prominent, pyramidal protuberance; from base, extending over edge of costa near base, a large fleshy, hairy protuberance; from the inner margin, for almost the entire length of the harpe, a conspicuous, expansible scale tuft, the scales of two kinds, short, broad, somewhat cupped scales and long, hair-like scales expanded and flattened distally. Anellus a broad, V-shaped band, finely scobinate at apex. Aedeagus moderately stout, straight, with an elongate scobinate patch laterally; vesica armed with two small groups of short, stout cornuti. Vinculum broadly rounded. Transtilla a broad U-shaped scobinate band. Uncus long, slender, beaked.

Female genitalia: Sternite of eighth segment strongly sclerotized and deeply incised on posterior edge to accommodate genital opening. Ductus bursae broad, flattened, strongly sclerotized, convoluted and studded with small spines at junction with bursa copulatrix. Bursa copulatrix asymmetrical, with a large, posterior evagination on the right side at the extremity of which is the inception of the ductus seminalis; signa two, small, toothed oval plates.

Alar expanse 37-43 mm.



1 *Utetheisa idae*

Type.—U. S. National Museum No. 53751.

Type locality.—Swain's Island, Newfoundland.

Food plant.—Unknown.

Remarks.—Described from the male type and five female paratypes all collected by Commander G. S. Stephenson, U. S. N., in July, 1937. One paratype is deposited in the Canadian National Collection; the remainder are in the U. S. National Museum.

This species differs from the other North American species and their forms by having the apex of the hind wing solid black and not bisected by the ground or some other light color.

The genitalia differ from all others I have seen (including those of Asiatic and European species) by the broad expansion of the cucullus of the harpe of the male. The female genitalia are typical of the group and possess the long, slender, tubular glands opening on the dorsal surface of the membrane between the ovipositor lobes and the collar. These glands are found on many other species of Arctiidae also.

This species is named in honor of my mother.

The drawings were made by Mrs. Eleanor A. Carlin, artist of the Bureau of Entomology and Plant Quarantine.

EXPLANATION OF PLATE 8.

- 1-1d. Male genitalia: 1, ventral aspect with aedeagus removed; 1a, lateral aspect of aedeagus; 1b, dorsal aspect of left harpe; 1c, anellus; 1d, transtilla.
2-2a. Female genitalia: 2, ventral aspect; 2a, dorsal aspect showing tubular glands.

BOOK NOTICE.

The Principles of Insect Physiology; by V. B. Wigglesworth, Reader in Entomology, London School of Hygiene and Tropical Medicine. 8vo., buckram, 434 pp., 316 illustrations, bibliog. New York, E. P. Dutton & Co., 1939. \$8.00 less 20%.

In this book the author has produced a work entirely worthy of his high reputation in the realm of Natural Science. As a reference book it is of the highest value and as a text book for class instruction it will prove indispensable. In addition to a complete discussion of all phases of insect physiology it contains ample and invaluable bibliographic material. The illustrations are appropriate and of excellent quality and the volume is substantially made and durably bound.—w. r. w.
